

Serial No.: 10/660,471
Confirmation No.: 4947
Applicant: PALMBERG *et al.*
Atty. Ref.: 06730.0056.NPUS00

AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 4, 5, 7 and 9 and add new claims 11 - 20 as follows:

1. (Currently Amended) A hydraulic power assisting steering apparatus comprising a valve that is arranged to be actuated depending on an applied torque for altering the pressure of an hydraulic fluid to be received by a hydraulic power steering system for applying a steering assist force, wherein the valve is arranged to be dynamically actuated further, according to a control mechanism depending on at least one external or internal vehicle input parameter.
2. (Original) The hydraulic power assisting steering apparatus of claim 1, wherein the valve is arranged to be dynamically actuated further by a hydraulically, a pneumatically or a electromechanically displacing of one member of the valve.
3. (Original) The hydraulic power assisting steering apparatus of claim 2, wherein one valve member is arranged to be rotatably and/or axially displaced with respect to a shaft in the hydraulic power steering system.
4. (Currently Amended) A hydraulic power assisting steering apparatus according to claim 3, wherein the a valve member is arranged to be electromechanically displaced by an electric motor.
5. (Currently Amended) The hydraulic power assisting steering apparatus of claim 4, wherein the electric motor is arranged to actuate a wheel or a cam on axis, which are arranged to engage the valve member.
6. (Original) The hydraulic power assisting steering apparatus of claim 5, wherein the wheel is a toothed wheel arranged to engage a toothed member on the valve member for a rotary displacement of the valve member.

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7. (Currently amended) The hydraulic power assisting steering apparatus of claim 5, wherein the cam axis is eccentrically or excentrically is arranged to rotatably engage with a guide portion arranged on the valve member for an axial displacement of the valve member.

8. (Original) The hydraulic power assisting steering apparatus of claim 7, wherein the valve member is arranged so that an axial displacement of the valve member causes it to be rotatably displaced.

9. (Currently Amended) A method for actuating a valve in a hydraulic power assisting steering apparatus depending on an applied torque, so as to alter the pressure of an hydraulic fluid to be received by a hydraulic power steering system for applying a steering assist force, the method comprising dynamically actuating the valve according to a control mechanism depending on at least one external or internal vehicle input parameter.

10. (Original) The method of claim 9, wherein the valve is dynamically actuated further by a hydraulically, a pneumatically or a electromechanically displacing of one member of the valve.

11. (New) A hydraulic power assisting steering apparatus comprising a valve that is arranged to be actuated depending on an applied torque for altering pressure of an hydraulic fluid to be received by a hydraulic power steering system for applying a steering assist force, wherein the valve is arranged to be dynamically actuated further according to a control mechanism selected from the group consisting of hydraulically, pneumatically and electromechanically displacing one member of the valve, wherein electromechanically displacing the one member of the valve includes rotatable and/or axial displacement with respect to a shaft in the hydraulic power steering system using an electric motor.

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12. (New) The hydraulic power assisting steering apparatus of claim 1, wherein the valve has a first valve member and a second valve member arranged to be actuated with respect to each other, depending on the applied torque and vehicle input parameter so as to dynamically adjust the steering assist force to fit a specific driving scenario.
13. (New) The hydraulic power assisting steering apparatus of claim 12, wherein the first and second valve members are arranged to be rotatably and/or axially displaced with respect to each other.
14. (New) The hydraulic power assisting steering apparatus of claim 13, wherein at least one of the valve members is arranged to be dynamically actuated further using a control mechanism selected from the group consisting of hydraulic, pneumatic and electromechanical displacement of the at least one valve member.
15. (New) A hydraulic power assisting steering apparatus according to claim 14, wherein the at least one of the valve members is arranged for electromechanical displacement using an electric motor.
16. (New) The hydraulic power assisting steering apparatus of claim 15, wherein the electric motor is operatively arranged for interaction with actuating means selected from a wheel and a cam that engages the at least one of the valve members.
17. (New) The hydraulic power assisting steering apparatus of claim 16, wherein the wheel is a toothed wheel arranged to engage a toothed member on the at least one valve member for rotary displacement thereof.
18. (New) The hydraulic power assisting steering apparatus of claim 16, wherein the cam is arranged to rotatably engage with a guide portion formed on the at least one valve member for at least an axial displacement of the valve member.

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19. (New) The hydraulic power assisting steering apparatus of claim 18, wherein the at least one valve member undergoes axial and rotational displacement of the at least one valve member.

20. (New) The method of claim 9, wherein the valve has a first valve member and a second valve member arranged to be actuated with respect to each other, depending on the applied torque and vehicle input parameter.